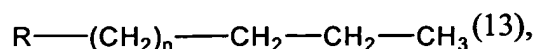


B. Amendment to the Claims

The following is a complete listing of the claims, and replaces all earlier versions and listings.

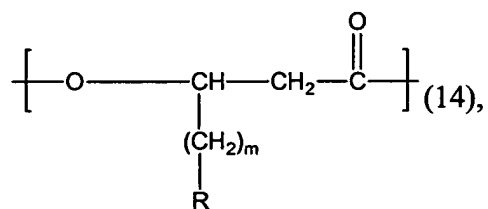
1. (Previously Presented) A method for manufacturing polyhydroxyalkanoate, comprising the steps of:

providing at least one selected from the group consisting of substituted alkanes represented by the following general formula (13):



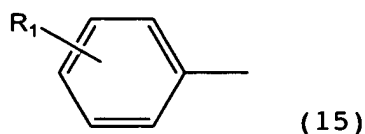
wherein R is a residue including an unsubstituted or substituted aromatic ring, and n is any integer selected from 0 to 9; and

producing polyhydroxyalkanoate comprising at least one selected from 3-hydroxy-substituted alkanoate units represented by the following general formula (14) in the molecule:

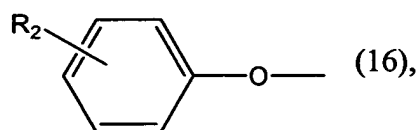


wherein R is a residue including a substituted aromatic ring; and m is any optional integer selected from 0 to 9, in the presence of a microorganism capable of producing said polyhydroxyalkanoate using at least one selected from the group consisting of said substituted alkanes as a starting compound.

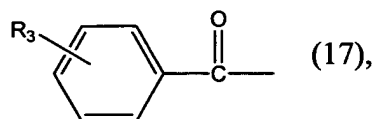
2. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 1, wherein R in general formulas (13) and (14) is any one selected from the group consisting of an unsubstituted or substituted phenyl residues represented by the chemical formula (15):



wherein R₁ is any one selected from the group consisting of -H, -CN, -NO₂, halogen, -CH₃, -C₂H₅, -C₃H₇, -CH₂=CH, -CF₃, -C₂F₅ and -C₃F₇, substituted phenoxy residues represented by the chemical formula (16):



wherein R₂ is any one selected from the group consisting of -H, -CN, -NO₂, halogen, -CH₃, -C₂H₅, -C₃H₇, -CH₂=CH, -CF₃, -C₂F₅ and -C₃F₇, and substituted benzoyl residues represented by the chemical formula (17):



wherein R₃ is any one selected from the group consisting of -H, -CN, -NO₂, halogen, -CH₃, -C₂H₅, -C₃H₇, -CH₂=CH, -CF₃, -C₂F₅ and -C₃F₇.

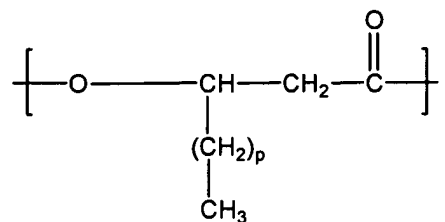
3. (Cancelled)

4. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 1, wherein relationship between n in general formula (13) and m in general formula (14) is represented by the following equation (1):

$$m=n-2l(1),$$

wherein l is any integer of $0 \leq l < (1/2)n$.

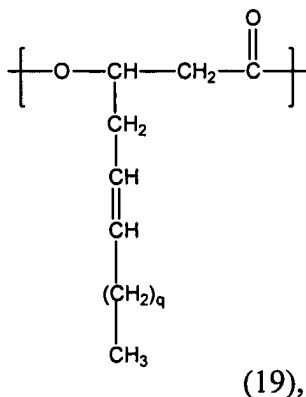
5. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 1, wherein said polyhydroxyalkanoate further comprises at least one selected from the group consisting of 3-hydroxy-alkanoic acid units represented by the following general formula (18):



(18),

wherein p is any integer selected from 0 to 8, which can have one or more values in the polymer, and

3-hydroxy-alka-5-enoic acid units represented by the following general formula (19):



wherein q is any integer selected from 3 to 5, which can have one or more values in the polymer.

6. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 1, comprising the step of culturing said microorganism in a medium containing at least one selected from the group consisting of said substituted alkanes.

7. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 6, further comprising the step of culturing said microorganism in a medium containing dicyclopropylketone.

8. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 7, wherein said culturing step is comprised of the steps of:

(step 1-1) culturing said microorganism in the medium further containing dicyclopropylketone and polypeptone, and subsequently

(step 1-2) culturing the microorganism cultured in said step 1-1 in a medium containing said substituted alkane and an organic acid or its salt.

9. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 8, said medium used in said step 1-2 further containing dicyclopropylketone.

10. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 8, said medium used in said step 1-1 further containing said substituted alkane.

11. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 8, wherein said saccharide is any of selected from the group consisting of glyceraldehyde, erythrose, arabinose, xylose, glucose, galactose, mannose, fructose, glycerol, erythritol, xylitol, gluconic acid, glucuronic acid, galacturonic acid, maltose, sucrose and lactose.

12. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 7, wherein said culturing step is comprised of the steps of:

(step 1-3) culturing said microorganism in the medium further containing dicyclopropylketone and saccharide, and subsequently

(step 1-4) culturing the microorganism cultured in said step 1-3 in a medium containing said substituted alkane and a saccharide.

13. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 12, said medium used in said step 1-4 further containing dicyclopropylketone.

14. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 12, said medium used in said step 1-3 further containing said substituted alkane.

15. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 12, wherein said saccharide is any of selected from the group consisting of glyceraldehyde, erythrose, arabinose, xylose, glucose, galactose, mannose, fructose, glycerol, erythritol, xylitol, gluconic acid, glucuronic acid, galacturonic acid, maltose, sucrose and lactose.

16. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 7, wherein said culturing step is comprised of the steps of:

(step 1-5) culturing said microorganism in the medium further containing dicyclopropylketone and polypeptone, and subsequently

(step 1-6) culturing the microorganism cultured in said step 1-5 in a medium containing said substituted alkane and a saccharide.

17. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 16, said medium used in said step 1-6 further containing dicyclopropylketone.

18. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 16, said medium used in said step 1-5 further containing said substituted alkane.

19. (Previously Presented) The method for manufacturing polyhydroxyalkanoate according to claim 16, wherein said saccharide is any of selected from the group consisting of glyceroaldehyde, erythrose, arabinose, xylose, glucose, galactose, mannose, fructose, glycerol, erythritol, xylitol, gluconic acid, glucuronic acid, galacturonic acid, maltose, sucrose and lactose.

20-39. (Cancelled)

40. (Original) The method for manufacturing polyhydroxyalkanoate according to claim 1, wherein the number average molecular weight of said polyhydroxy alkanoate is 5000 to 1000000.